Suggested MRP Language re Management Questions

This MRP Plan has a set of objectives that are identified in the attached Information Sheet, which is part of the MRP Order. These objectives will be addressed as Coalition Groups develop scientifically sound MRP Plans that are structured to answer the five key management questions listed below. Taken together, answers to these five questions will provide a comprehensive picture of conditions in receiving waters and of the relative success of management actions taken to address high-priority water quality problems. The monitoring studies undertaken to answer the five management questions constitute the Long Term Moniitoring Strategy (LTMS). The questions include:

QUESTION No.1: Are conditions in waters of the State that receive agricultural drainage or are affected by other irrigated agriculture activities within Coalition Group boundaries protective, or likely to be protective, of beneficial uses?

QUESTION No.2: What is the magnitude and extent of current or potential water quality problems in waters of the State that receive agricultural drainage or are affected by other irrigated agriculture activities within Coalition Group boundaries, as determined using monitoring information?

QUESTION No.3: What are the contributing source(s) from irrigated agriculture to the water quality problems in waters of the State that receive agricultural drainage or are affected by other irrigated agriculture activities within Coalition Group boundaries?

QUESTION No.4: What are the management practices that are being implemented to reduce the impacts of irrigated agriculture on waters of the State within the Coalition Group boundaries and where are they being applied?

QUESTION No.5: Are conditions in waters of the State within Coalition Group boundaries getting better or worse through implementation of management practices?

The Regional Board is aware that water quality monitoring has been ongoing to varying degrees in many parts of the Central Valley. Thus, important steps, such as basic assessments of condition or source identification studies, have been completed in some areas. In addition, the degree to which the five management questions have been addressed varies substantially across the region, in part due to differing monitoring histories and in part due to the diverse nature of surface waters in different parts of the region. This is clearly documented in the Zone Reports.

The Regional Board therefore does not assume that each Coalition Group is starting with a blank slate, nor that each Coalition Group will implement the MRP's monitoring guidance in a linear, stepwise fashion. Nor is it necessarily envisioned that all five management questions will be addressed simultaneously. Instead, as Figure 1 illustrates, different Coalition Groups might enter the process at different points and the MRP is intended to improve each Coalition Group's ability to document linkages among the five management questions, over some appropriate period of time. This is best accomplished through the following three steps (see also Figure 2):

1. Evaluate the Coalition Group's ability to answer each of the five management questions with the information presently available to them

- 2. Identify critical gaps in knowledge (e.g., inability to document impacts, lack of knowledge about potential sources, absence of trend monitoring component) relevant to the Coalition Group's specific circumstances
- 3. Use the MRP Order as a framework for filling in the data gaps and for developing monitoring components suited to each Coalition Group's circumstances, documenting how the five key management questions will be answered.

The Zone Reports document important differences among areas of the Central Valley in terms of relative knowledge about the condition of surface waters and in design and coverage of monitoring programs. Such differences confirm that implementing the MRP Plans will most likely involve focusing on different questions, and thus emphasizing different designs, for different Coalition Groups. For example, source identification designs (Questions 3 and 4) might be the initial emphasis for one Coalition Group, but trend monitoring designs (Question 5) for another. The overall objective of the MRP is that each Coalition Group will fully address each of the five management questions over an appropriate period of time and in a manner that makes the best use of existing information.

The MRP is not intended as a "copy and paste" list of static monitoring requirements. Rather, its intent is to provide monitoring design guidance in sufficient detail to assure consistency in approach, but also allow for site-specific modifications and adaptations as necessary.

Figure 1. Overview of the functional relationships among the five management questions. The answer to each question provides the basis for developing the monitoring design to answer the next. Specific monitoring programs may have addressed questions in parallel or out of sequence, depending on available knowledge and specific information needs. Thus, the process may be entered at any point, depending on the degree of current knowledge.

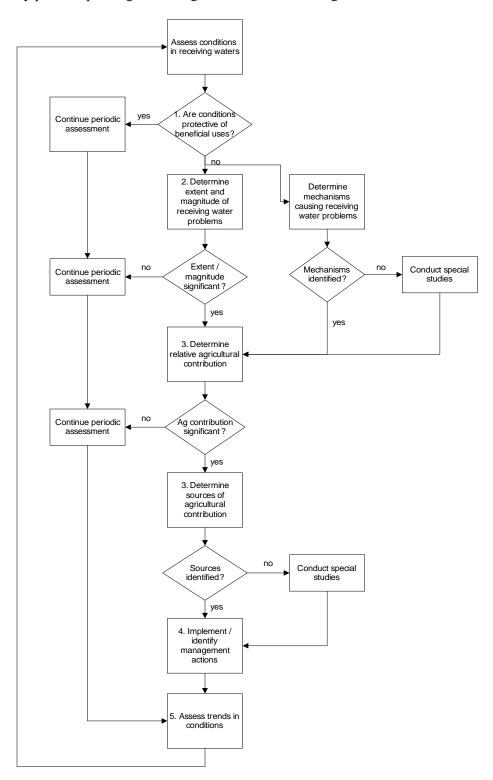


Figure 2. General process for applying the MRP design guidance to an existing Coalition Group monitoring program.

